

ABSTRACT

The outer shape of a quartz crystal blank is processed to have a predetermined shape, thereby providing an SC cut crystal resonator capable of reliably and reproducibly suppressing B mode resonance. In this SC cut crystal resonator, the surface of the quartz crystal orthogonal to the Y axis is rotated through 33° to 35° about the X axis and is then rotated from this rotated position through 22° to 24° about the Z axis, and a slender quartz crystal blank oblong in an X' axis direction is cut from the rotated surface. The end surface of the quartz crystal blank orthogonal to the Z' axis is tilted in a direction rotated through $+7^\circ$ to $+13^\circ$ or -7° to -13° about the X' axis.

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